COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE LAKE VILLAGE)	
WATER ASSOCIATION, INC. FOR APPROVAL)	CASE NO.
OF A PROPOSED INCREASE IN RATES FOR)	2003-00401
WATER SERVICE)	
ORDER	,	

On October 20, 2003, Lake Village Water Association, Inc. ("Lake Village") filed its application for Commission approval of proposed water rates. Commission Staff, having performed a limited financial review of Lake Village's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 13th day of January, 2004.

By the Commission

ATTEST:

STAFF REPORT

ON

LAKE VILLAGE WATER ASSOCIATION, INC.

CASE NO. 2003-00401

On October 20, 2003, Lake Village Water Association ("Lake Village") submitted an application seeking to increase its rates for water service pursuant to 807 KAR 5:001, Section 10. To establish the basis for its application Lake Village selected the twelve months ended December 31, 2002 as its test year. Lake Village determined its revenue requirement from rates to be \$1,022,428, an increase of \$304,149 or 42.34 percent over normalized test year revenues from rates of \$718,278 as determined by Lake Village. The proposed rates would increase a residential bill of 5,000 gallons per month from \$35.52 to \$43.86, an increase of 23.47 percent.

Staff conducted a field review to gather information concerning Lake Village's test year operating results and the pro forma information presented in its application. The scope of Staff's review was limited to obtaining information as to whether test period operating revenues and expenses were representative of normal operations. All pro forma adjustments to test year operations are required to be known and measurable pursuant to 807 KAR 5001, Section 10 (7). Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

This report summarizes Staff's review and recommendations. Scott Lawless is responsible for the revenue requirement determination while Eddie Beavers determined pro forma revenues and developed the cost of service study.

Attachment A of this report is Lake Village's pro forma adjusted operating income statement as determined by Lake Village and included in its application. Staff compiled the adjusted operating income statement as shown at Attachment B. Attachment B also

includes explanation of Staff's proposed adjustments as well as discussion of the

adjustments made by Lake Village in Attachment A.

Attachment D of this report compares Lake Village's revenue requirement as

determined by Lake Village and Staff. Based on the 120 percent debt service coverage

requirement of Lake Village's loan resolutions Staff calculated Lake Village's revenue

requirements from rates to be \$891,797, an increase of \$155,513 or 21.12 percent over

normalized revenues as determined by Staff of \$736,284. Staff recommends that the

Commission approve rates for Lake Village that will produce annual revenue from rates

of \$891,797.

Staff prepared the cost of service study as shown at Attachment E of this report.

The study was prepared using guidelines established by the American Water Works

Association. In the study Staff allocates Lake Village's pro forma operating costs to its

various customer classes. Staff's recommended rates are shown at Attachment E,

Page 11. Those rates will increase the monthly residential use of 5,000 gallons from

\$35.52 to \$40.78, an increase of 14.81 percent.

Signatures

Prepared by: Jack Scott Lawless, CPA

Public Utility Financial Analyst Water and Sewer Revenue

Requirements Branch

Division of Financial Analysis

Prepare by: Eddie Beavers Public Utility Rate Analyst

Communications, Water and Sewer Rate Design Branch

Division of Financial Analysis

ATTACHMENT A STAFF REPORT CASE NO. 2003-00401 LAKE VILLAGE'S REQUESTED OPERATING STATEMENT

O a serial Para serial	Te	est Year	Adj	justments	Р	ro forma
Operating Revenue Sales of Water	\$	708,479	\$	9,799	\$	718,278
Other Operating Revenue	Ψ	18,445	Ψ	3,733	Ψ	18,445
Other operating revenue		10,440				10,440
Total Operating Revenue		726,924		9,799		736,723
Operating Expenses						
Operation and Maintenance Expense						
Salaries and Wages - Employees		154,815		42,979		197,794
Salaries and Wages - Officers		12,000		,		12,000
Employee Pensions and Benefits		14,614		3,000		17,614
Purchased Water		237,349		,		237,349
Materials and Supplies		54,581				54,581
Contractual Services - Engineering		15,694				15,694
Contractual Services - Accounting		4,350				4,350
Contractual Services - Legal		6,816				6,816
Transportation Expense		9,385				9,385
Insurance - Vehicles		5,164		566		5,730
Insurance - General Liability		6,628		35		6,663
Insurance - Worker's Compensation		2,938		2,563		5,501
Insurance Other		3,778		446		4,224
Miscellaneous Expenses						
Office Supplies and Computer Support		19,302				19,302
Field Supplies		751				751
Employee Benefits - Uniforms		3,174				3,174
Purchased Power		5,780				5,780
Dues and Subscriptions		672				672
Communications		7,359				7,359
Training		1,495				1,495
Travel		6				6
General		2,763				2,763
Total Operation and Maintenance Expenses		569,414		49,589		619,003
Amortization Expense				4,398		4,398
Depreciation Expense		152,767				152,767
Taxes Other Than Income		15,983				15,983
Total Operating Expenses		738,164		53,987		792,151
Net Operating Income		(11,240)		(44,188)		(55,428)
Plus: Interest Income		7,487		7,351		14,838
Income Available to Service Debt	\$	(3,753)	\$	(36,837)	\$	(40,590)

ATTACHMENT B STAFF REPORT CASE NO. 2003-00401 STAFF'S ADJUSTED OPERATING STATEMENT AND EXPLANATION OF ADJUSTMENTS

On another Develope	Test Year	Adjustments	Ref.	F	Pro forma
Operating Revenue Sales of Water	\$ 708,479	\$ 10,116		Ф	700 004
Other Operating Revenue	18,445	17,689	В	\$	736,284 18,445
Cities operating revenue	10,440				10,440
Total Operating Revenue	726,924	27,805			754,729
Operating Expenses					
Operation and Maintenance Expense					
Salaries and Wages - Employees	154,815	18,844	С		173,659
Salaries and Wages - Officers	12,000				12,000
Employee Pensions and Benefits	14,614	3,386	D		18,000
Purchased Water	237,349	(32,146)	Е		205,203
Materials and Supplies	54,581	(32,700)	F		21,881
Contractual Services - Engineering	15,694	(13,859)	G		1,835
Contractual Services - Accounting	4,350	,			4,350
Contractual Services - Legal	6,816	(4,631)	Н		2,185
Transportation Expense	9,385	(1,685)			7,700
Insurance - Vehicles	5,164	566	J		5,730
Insurance - General Liability	6,628	35	J		6,663
Insurance - Worker's Compensation	2,938	2,563	J		5,501
Insurance Other	3,778	446	J		4,224
Miscellaneous Expenses:	,				•
Office Supplies and Computer Support	19,302	(2,650)	K		16,652
Field Supplies	, 751	(, ,			751
Employee Benefits - Uniforms	3,174				3,174
Purchased Power	5,780	(613)	L		5,167
Dues and Subscriptions	672	(/			672
Communications	7,359				7,359
Training	1,495				1,495
Travel	6				6
General	2,763	(158)	М		2,605
		(100)			
Total Operation and Maintenance Expenses	569,414	(62,601)			506,812
Depreciation Expense	152,767	(10,386)	Ν		142,381
Taxes Other Than Income	15,983	335	0		16,318
Total Operating Expenses	738,164	(72,652)			665,512
		, ,			
Net Operating Income	(11,240)	100,457			89,217
Plus: Interest Income	7,487				7,487
Income Available to Service Debt	\$ (3,753)	\$ 100,457		\$	96,704

(A & B) <u>Sales of Water</u>. The normalized revenue stated in Lake Village's application was \$751,561. Lake Village's 2002 Annual Report revenue from water sales of \$708,479 was adjusted by Staff to develop the normalized revenue from rates. These adjustments were made from the information provided by Lake Village during Staff's field review. The first adjustment was for the revenue that should have been generated by the normal water sales, as calculated in their current declining block rate structure; this adjustment was for \$10,116. The second adjustment was for the additional customers that were added during the test year (19 new customers) and in 2003 (32 new customers), this adjustment was for \$17,689. These two (2) adjustments provide normalized revenue from rates of \$736,284.

(C) <u>Salaries and Wages – Employees</u>. Lake Village reported test year salaries and wages - employees expense at \$154,815. It proposed to increase the test year amount to \$197,794. Lake Village's pro forma payroll was determined as follows:

Position	Test Year Salary	Five Percent Raise	Pro forma
General Manager	\$40,389	\$2,019	\$42,408
Office Manager	30,817	1,541	32,358
Office Employee	23,605	1,180	24,785
Field Employee #1	45,467	2,273	47,740
Field Employee #2	28,287	<u>1,414</u>	29,701
Total	<u>\$168,565</u>	<u>\$8,427</u>	176,992
New Employee at \$10	per hour		<u>20,800</u>
Pro forma			<u>\$197,792</u>

Staff disagrees with Lake Village's calculation and recommends that it be denied.

First, the test year salary level upon which the calculation was based is overstated.

Test year salaries and wages – employees was properly stated at \$154,815 in Lake

Villages 2002 annual report and in Lake Village's pro forma adjusted operating statement included in its application. Yet, in Lake Village's adjustment, test year salaries and wages – employees is stated at \$168,565. During Staff's review it was discovered that Lake Village was incorrectly including non-taxable fringe benefits in employee taxable wages when preparing payroll tax returns for the test year. While these benefits were properly reported as employee benefits in Lake Village's financial statements, Staff believes that they were improperly included in salaries and wages for the purpose of determining pro forma payroll.

Second, the Lake Village adjustment includes a salary increase of 5 percent applied to all employee wages. At the time of Staff's review there had been no such pay increase approved by Lake Village's Board of Directors.

Third, on December 2, 2003, Lake Village's Board of Directors approved the hiring of an additional employee at the starting pay rate of \$8 per hour, not the \$10 per hour included in Lake Village's adjustment.

Staff calculated Lake Village's pro forma salaries and wages – employees to be \$173,659 based on the following information.

Position	Regular Hours	Test Year Overtime At 1.5 of Regular	Regular Hourly Pay Rate	Effective Date of Wage or Salary	Pro forma
General Manager Office Employee #1 Office Employee #2 Field Employee #1 Field Employee #2 New Employee		295.50 78.25	11.00 16.30 11.55 8.00	2/03 2/00 5/03 5/03 11/03 12/03	\$41,225 26,405 22,880 41,129 25,380 16,640
Pro forma					<u>\$173,659</u>

Staff recommends that the Commission approve an increase to test year salaries and wages – employees in the amount of \$18,844 (\$173,659 - \$154,815).

(D) <u>Employee Pensions and Benefits</u>. As a part of its employee compensation package Lake Village makes a flat, monthly, monetary contribution on behalf of each full-time employee to either a health insurance plan or an Independent Retirement Account ("IRA"). An employee may apply a portion of the contribution toward both of the two benefits.

Early during the test year Lake Village increased its contribution rate per employee from \$200 to \$250 per month. Also, Lake Village's test year expense will increase due to the contribution to be made on behalf of the new employee approved for hire on December 2, 2003. Lake Village requested that test year expenses be increased by \$3,000 (\$250 x 12) to account for the new employee contribution. Staff recommends that the Commission approve an increase to test year expenses in the amount of \$3,386 to account for the increases in both employee and contribution levels. Detail of Adjustment.

Monthly Contribution	\$250
Times: Number of Employees	6
12 months	<u>12</u>
Pro forma	18,000
Less: Test year	<u>(14,614</u>)
Adjustment	<u>\$3,386</u>

(E) <u>Purchased Water</u>. During the test year Lake Village reported purchased water expense in the amount of \$237,349. Lake Village purchases water from the Cities of Harrodsburg and Danville. Lake Village proposed no adjustments to the test year amount. Staff has identified three areas of adjustment concerning purchased water: 1) to account for additional demand for water sales to customers added during and after

the test year, 2) to limit pro forma water purchases to the 15 percent water loss requirement of 807 KAR 5:066, Section 6 (3), and 3) to account for an increase in charges of Harrodsburg that were made effective December 31, 2003.

Test year gallons sold totaled 104,356,400. Due to the addition of new customers, Staff determined normalized gallons to be sold in the pro forma to be 106,846,400. Staff recommends that the Commission adjust test year expenses accordingly.

During the test year Lake Village sold 104,356,400 gallons, used 12,800 gallons for flushing, and purchased 20,213,398 cubic feet (See Col. B, Attachment C). Thus, Lake Village's water loss was calculated to be 30.97 percent.

Cubic Feet Purchased	20,213,398
Convert to Gallons, Times 7.48	<u>7.48</u>
Gallons Purchased	151,196,217
Less: Gallons Sold and Used by Lake Village	<u>104,369,200</u>
Gallons Lost	<u>46,827,017</u>
Percent Lost	<u>30.97</u> %

Lake Village attributes its excessive water loss to improper installation of transmission and distribution main placed into service prior to 1986. Staff recommends that Lake Village develop and implement an aggressive plan to bring its water loss within regulation requirements and that the Commission limit Lake Village's pro forma purchased water expense to the 15 percent water loss requirement of 807 KAR 5:006, Section 6 (3). Pro forma allowable purchases were calculated to be 125,716,706 gallons.

Normalized Gallons to be Sold in the Pro forma	106,846,400
Gallons Used by Lake Village	<u>12,800</u>
Total	106,859,200
Divide by: 1 – 15 percent allowed	<u>85</u> %
Allowable Pro forma Purchases	<u>125,716,706</u>

During the test year Lake Village purchased 12,802,783 cubic feet from the City of Harrodsburg. Effective December 31, 2003, Harrodsburg adjusted its rates as follows:

Usage	Old	New
First 250 Minimum Bill	\$6.00	\$6.27
Next 750 per 100 cubic ft.	2.28	2.38
Next 3,000 "	1.98	2.07
Next 6,000 "	1.68	1.76
Next 25,000 "	1.44	1.50
Next 25,000 "	1.20	1.25
Over 60,000 "	.96	1.00

As detailed in Attachment C Staff calculated pro forma purchased water to be \$205,203 requiring a decrease to test year expenses of \$32,146.

- (F) <u>Materials and Supplies</u>. During the test year Lake Village reported materials and supplies expense in the amount of \$54,581. Of that amount \$32,700 represented meter supplies and kits to upgrade existing meters with "touchread" capabilities. All expenditures for meters and conversion kits should be capitalized as plant in service. Staff has eliminated \$32,700 from test year expenses and included a provision for its recovery through adjustment to test year depreciation expense.
- (G) <u>Contractual Services Engineering</u>. Test year expenses included \$13,859 paid to Robert Brook for new main inspection fees. This amount should be included in the capital costs of the mains. Staff has eliminated them from test year operating expenses and has included a provision for their recovery through pro forma depreciation expense.
- (H) <u>Contractual Service Legal</u>. Test year expenses include legal fees related to easements and condemnations in the amount of \$3,576 and construction projects in the amount of \$1,055. Each of these amounts is capital in nature and should be capitalized

instead of expensed. Staff has reduced test year expenses by \$4,631. A provision for recovery of these expenditures has been provided through pro forma depreciation to the extent possible. Land and land rights are not depreciable.

- (I) <u>Transportation Expenses</u>. During the test year a total of \$1,685 was expensed for the towing and repair of a Lake Village truck that was stolen from its headquarters building. Lake Village recovered these costs through an insurance claim where the proceeds were received in August, 2003. The expense amount should be eliminated from test year operations.
- (J) <u>Insurance</u>. Lake Village proposed and Staff accepts increases to all test year insurance premiums. To supported each pro forma amount Lake Village included as part of its original application copies of vendor invoices that were effective subsequent to the end of the test year. The following details each adjustment by account.

	Pro forma	Test Year	Adjustment
Vehicles	5,730	(5,164)	566
General Liability	6,663	(6,628)	35
Worker's Compensation	5,501	(2,938)	2,563
Other	4,224	(3,778)	446

(K) <u>Miscellaneous - Office Supplies and Computer Support.</u> During the test year Lake Village paid Micro-Comm Inc. two contract payments of \$2,650 for its 2002 and 2003 annual telemetry service contracts. The 2002 and 2003 contract payments were made on January 29, 2002, with check number 11668 and December 31, 2002, with check number 12361, respectively. The payment of the 2003 contract should have been expensed in 2003 and has thus been eliminated from test year operating expenses.

(L) <u>Miscellaneous – Purchased Power</u>. During the test year Lake Village incurred purchased power for pumping expense of \$3,836 for the operation of its two pumping stations. As discussed at Item E of this Attachment, Staff has recommended all costs related to excessive water loss be limited to that allowable by regulation, or 15 percent. Accordingly, Staff recommends that test year purchased power for pumping be decreased by \$613.

Test Year Water Loss Percentage	30.97%
Less: Allowable Percentage	<u>15.00</u> %
Percentage to Disallow	15.97%
Times: Cost of Purchased Power for Pumping	<u>\$3,836</u>
Decrease	<u>\$613</u>

- (M) <u>Miscellaneous General</u>. Included in this account was \$158 for the purchase of pies to be provided at the monthly Board of Director's meetings. This expense is not essential to Lake Village's operations and should have been recorded in account 426 Miscellaneous Nonutility Expenses. Staff has removed this amount from test year operating expenses.
- (N) <u>Depreciation/Amortization Expense</u>. Test year depreciation expense was reported at \$152,767. Lake Village did not propose any adjustments to test year depreciation expense but did request amortization of computer hardware and software that was purchased and placed into service subsequent to the test year. Its adjustment increased test year expenses by \$4,398. Staff recommends numerous adjustments to test year depreciation/amortization expense that provide a net decrease of \$10,385. The following summarizes and explains Staff's recommendations.

Computer Hardware and Software Amortization	\$1,639
Change in Depreciable Lives of Mains	(29,628)
Contract 8 Extension	14,777
Staff Capitalization of Test Year Expenses	1,933
Annualize Depreciation on Test Year Capital	<u>894</u>
Net Decrease	<u>\$(10,385</u>)

Computer Hardware and Software Amortization. Subsequent to the test year Lake Village purchased and placed into service a new, windows operated, computerized accounting and billing system. This new computer system replaced all of the hardware and software of the existing "TAABs II" DOS operated system. In its application Lake Village stated the cost of the new system at \$26,427 with annual amortization expense totaling \$4,398. The following details Lake Village's calculations. All costs were support with copies of vendor invoices as included in the application.

Item	Cost	Life	Expense
IMSofTech, Inhance 5,000 Software	\$4,143	10	\$414
IMSofTech, DOS 800 Service for 2003	2,640	10	264
Cougar Mountain Software, Software			
and Annual Maintenance Contract	9,790	10	979
Cougar Mountain Software, Training	1,331	10	133
Invensys, Auto Read Software Support	1,000	10	100
Office Depot, Printers	208	3	69
Parrott, Ely and Hurt, Computers	<u>7,315</u>	3	<u>2,438</u>
Total	<u>\$26,427</u>		<u>\$4,398</u>

Staff calculated the following pro forma amortization/depreciation expense adjustment for the new computers and software.

Item	Cost	Life	Expense
IMSofTech, Inhance 5,000 Software	\$4,143	5	\$829
IMSofTech, DOS 800 Support for 2003	0		0
Cougar Mountain Software, Software			
and Annual Maintenance Contract	7,291	5	1,458
Cougar Mountain Software, Training	1,331	5	266
Invensys, Auto Read Software Support	0		0
Office Depot, Printers	208	5	42
Parrott, Ely and Hurt, Computers	<u>6,593</u>	5	<u>1,319</u>
Total	<u>\$19,566</u>		3,914
Less: Test Year Depreciation Expense or	TAABS II		<u>(2,275</u>)
Net Increase			<u>\$1,639</u>

The IMSofTech software support for 2003 in the amount of \$2,640 as included in Lake Village's adjustment is related to the replaced DOS system and should not be included in the cost of the new systems.

Included in the Cougar Mountain invoice of \$9,789.50 was \$2,499 for "annual maintenance." This is an annual expense and should not be amortized. Furthermore, already included in test year expenses is a provision for annual software support for the replaced DOS system in the amount of \$2,420 paid to IMSofTech on October 31, 2002, with check number 12259. To include post test year expenses without eliminating the test year expense results in an overstatement of pro forma expenses. Staff has eliminated the \$2,499 from its pro forma adjustment.

The \$1,000 charge from Invensys for auto read software support was also represented in test year expenses. Invensys was paid \$750 on August 31, 2002, with check number 12133. The amount requested for amortization has therefore been removed.

Lake Village purchased its new computers from Parrott, Ely and Hurt. The invoice as provided in the application supporting the purchase totaled \$6,593. Staff used this amount in determining the adjustment to test year expenses.

Staff assigned a 5-year depreciable life to all the items included in its adjustment. Determining depreciable lives is subjective, however, a 5-year life better coincides with the actual life of Lake Village's replaced DOS system than those proposed by Lake Village. Staff notes that the DOS operated system was placed into service in late 1997 or about 6 years ago. Staff therefore believes that a 5 year life is more appropriate than those proposed by Lake Village.

Test year expenses includes \$2,275 for depreciation taken on the replaced DOS system. This amount should be removed as the system is no longer in service.

Change in Depreciable Lives of Mains. At December 31, 2002, the end of the test year, Lake Village's stated costs for transmission and distribution mains were \$3,205,668. Test year depreciation expense was taken on these assets in the amount of \$93,742 based on a 33-year useful life. The National Association of Regulatory Utility Commissioners manual for Depreciation Practices for Small Water Utilities states the estimated useful life of transmission and distribution mains to be between 50 and 75 years. Staff proposes to restate depreciation expense on Lake Village's transmission and distribution mains to reflect a 50-year life.

As noted at Item (E) of this Attachment Lake Village attributes its excessive water loss to improperly installed main placed into service prior to 1986. During Staff's review Lake Village stated that it hopes to begin replacing the faulty main within the next couple of years. Based upon these circumstances Staff considered leaving the depreciable lives of main placed into service prior to 1986 at 33 years. Staff ultimately determined that would be inappropriate since Lake Village has not provided detailed evidence supporting its claim that all main placed into service prior to 1986 needs to be

replaced nor has Lake Village developed a specific main replacement program. In addition, before Lake Village begins replacing main it should perform adequate study to determine that main replacement is necessary and cost effective.

Staff recommends the following adjustment to test year operations.

Cost of Mains	\$3,205,668
Divide by: 50 years	<u>50</u>
Restated Expense	64,113
Less: Test year	<u>(93,742)</u>
Decrease	<u>\$(29,629)</u>

If this adjustment is accepted by the Commission, Lake Village should ensure that all necessary adjustments to depreciation expense, accumulated depreciation and retained earnings are reflected in its 2003 financial statements filed with the Commission.

Contract 8 Extension. The final phase of the contract 8 extension was brought on-line in October, 2003. The total cost of the project was \$738,859. Test year depreciation expense should be adjusted to include recovery of depreciation on this main extension. Staff calculated an increase to test year expenses of \$14,777 (\$738,859 / 50 years).

Staff Capitalization of Test Year Expenses. At Items F, G, and H of this Attachment Staff capitalized certain expenditures that were expensed by Lake Village during the test year. The following adjustment allows for a provision of depreciation on those items.

Item	Cost	Life	Expense
Meter Supplies	\$32,700	20	\$1,635
Engineering Inspection Fees	13,859	50	277
Legal Fees - Land and Land Rights	3,576	0	0
Legal Fees - Construction	1,055	50	<u>21</u>
Increase			<u>\$1,933</u>

Annualize Depreciation on Test Year Capital. Lake Village capitalized the purchase of certain assets that were placed into service during the test year. Since these assets were not in service during the entire test year, only partial year depreciation is included in test year depreciation expense. In this adjustment Staff has annualized depreciation on these items except for the amounts capitalized as transmission and distribution mains. Those amounts were annualized by Staff in the adjustment restating the mains depreciable lives from 33 to 50 years.

Item	Cost	Life	Expense
Customer Service Lines	\$2,064	33	\$63
Meters	25,421	20	<u>1,271</u>
Total			1,334
Less: Test year			<u>(439</u>)
Increase			<u>\$894</u>

(O) <u>Taxes Other Than Income</u>. Staff recommends that the Commission allow Lake Village to adjust test year expenses for increased payroll taxes that will result from the pro forma level of taxable wages. As stated previously, Lake Village had erroneously calculated tax withholdings on all portions of its employee fringe benefit contribution. It is appropriate to withhold taxes on contributions to an employee's IRA as they are not excludable benefits as defined by the IRS tax code. However, the amounts paid for health insurance premiums are an excludable benefit since they are paid through an "accountable" plan. The calculation of pro forma payroll tax expense is determined as follows:

Pro forma Salaries and Wages – Employees	\$173,659
Pro forma Salaries and Wages – Board of Directors	12,000
IRA Contribution	<u>7,005</u>
Total Compensation Subject to Tax	192,664
Times: Tax Rate	<u>7.65</u> %
Pro forma	14,739
Less: Test year	<u>(14,404</u>)
Adjustment	<u>\$335</u>

ATTACHMENT C STAFF REPORT CASE NO. 2003-00401 CALCULATION OF PRO FORMA PURCHASED WATER

Test Year Vendor/ Vendor/ Service Dates (Col. A) Harrodsburg Account 13-2500 12/15/02-1/15/02 1/24/02-11/25/02 9/24/02-10/24/02 1.440,000 Test Year Allocation of Pro forma Cubic Feet Charge for Pro Forma Percent Gallons to be to be Purchased Pro Forma Purchased (Gallons / 7.48) Purchases (Col. D) (Col. E) (Col. E) (Col. F) 467,125.74 4,751.73 1,25/02-12/15/02 4,221,051 5,684.61 3,3912,049 5,23,001.23 5,288.73 8,056,043 1,107,321,03 1,1761.61 1,25/02.0/24/02 1,147,000 1,1300 1,1	
Vendor/ Cubic Feet Percent Gallons to be Cubic Feet Charge for to be Purchased Service Dates Purchases of Total Purchased (Gallons / 7.48) Purchases (Col. A) (Col. B) (Col. C) (Col. D) (Col. E) (Col. E) Harrodsburg Account 13-2500 12/15/02-1/15/03 561,800 2.779344670% 3,494,101 467,125.74 4,751.7 11/25/02-12/15/02 678,683 3.357589852% 4,221,051 564,311.68 5,684.6 10/24/02-11/25/02 629,000 3.111797433% 3,912,049 523,001.23 5,288.7 9/24/02-10/24/02 617,300 3.053915032% 3,839,281 513,272.91 5,194.7	
Vendor/ Cubic Feet Percent Gallons to be to be Purchased Pro Forma Service Dates Purchases of Total Purchased (Gallons / 7.48) Purchases (Col. A) (Col. B) (Col. C) (Col. D) (Col. E) (Col. F) Harrodsburg Account 13-2500 561,800 2.779344670% 3,494,101 467,125.74 4,751.7 11/25/02-12/15/02 678,683 3.357589852% 4,221,051 564,311.68 5,684.6 10/24/02-11/25/02 629,000 3.111797433% 3,912,049 523,001.23 5,288.7 9/24/02-10/24/02 617,300 3.053915032% 3,839,281 513,272.91 5,194.7	
Service Dates (Col. A) Purchases (Col. B) of Total (Col. C) Purchased (Col. D) (Gallons / 7.48) Purchases (Col. E) Harrodsburg Account 13-2500 12/15/02-1/15/03 561,800 561,8	
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9/24/02-10/24/02 617,300 3.053915032% 3,839,281 513,272.91 5,194.7	69
	11
9/25/02 0/24/02 1 440 000 7 4220077620/ 0 066 042 4 407 224 02 44 704 /	72
8/25/02-9/24/02 1,440,000 7.123987763% 8,956,043 1,197,331.92 11,761.6	69
7/08/02-8/25/02 592,900 2.933203017% 3,687,526 492,984.79 4,999.9	95
6/14/02-7/08/02 413,800 2.047157039% 2,573,618 344,066.63 3,570.3	34
5/15/02-6/14/02 661,300 3.271592436% 4,112,938 549,858.05 5,545.9	94
4/15/02-5/15/02 557,700 2.759061094% 3,468,601 463,716.67 4,718.9	98
3/15/02-4/15/02 567,200 2.806059624% 3,527,686 471,615.74 4,794.8	81
2/26/02-3/15/02 478,100 2.365262882% 2,973,531 397,530.83 4,083.6	60
1/17/02-2/15/02 460,000 2.275718313% 2,860,958 382,481.03 3,939.1	
Account 13-2510	
12/15/02-1/15/03 450,577 2.229100718% 2,802,352 374,645.99 3,863.9	90
11/25/02-12/15/02 465,623 2.303536496% 2,895,930 387,156.44 3,984.0	
10/24/02-11/25/02 413,200 2.044188711% 2,569,887 343,567.74 3,565.5	
9/24/02-10/24/02 436,800 2.160942955% 2,716,666 363,190.68 3,753.9	
8/25/02-9/24/02 536,600 2.654674884% 3,337,370 446,172.44 4,550.5	
7/08/02-8/25/02 358,900 1.775555006% 2,232,169 298,418.35 3,132.	
6/14/02-7/08/02 261,800 1.295180553% 1,628,258 217,681.59 2,357.0	
5/15/02-6/14/02 465,800 2.304412153% 2,897,031 387,303.62 3,985.4	
4/15/02-5/15/02 488,000 2.414240297% 3,035,103 405,762.48 4,162.6	
3/15/02-4/15/02 427,900 2.116912753% 2,661,313 355,790.51 3,682.8	
2/26/02-3/15/02 413,100 2.043693990% 2,569,265 343,484.59 3,564.7	
1/17/02-2/15/02 426,700 2.110976096% 2,653,850 354,792.73 3,673.3	
777762 2710762 120,700 2.111007000070 2,000,000 001,702.70 0,070.0	٠.
Danville	
2/11/2002 373,102 1.845815335% 2,320,498 310,227.04 3,524.	18
3/6/2002 321,702 1.591528550% 2,000,817 267,488.94 3,113.8	
4/4/2002 388,902 1.923981312% 2,418,766 323,364.43 3,650.3	
5/7/2002 326,802 1.616759340% 2,032,537 271,729.49 3,154.6	
6/6/2002 507,702 2.511710302% 3,157,639 422,144.31 4,598.5	
7/10/2002 632,293 3.128088607% 3,932,530 525,739.30 5,580.2	
8/9/2002 603,339 2.984846981% 3,752,451 501,664.61 5,361.7	
9/1/2002 715,962 3.542017032% 4,452,907 595,308.44 6,213.3	
10/8/2002 715,962 3.542017052% 4,452,907 595,506.44 6,215.5 10/8/2002 669,252 3.310932679% 4,162,395 556,469.99 5,859.8	
11/7/2002 729,591 3.609442608% 4,537,672 606,640.69 6,316.4 12/4/2002 1,113,661 5.509518983% 6,926,386 925,987.40 9,222.4	
1/9/2003 1,028,307 5.087254503% 6,395,529 855,017.22 8,576.6	
1/3/2000 1,020,007 3.007204000/0 0,030,023 000,017.22 0,070.0	00
20,213,398 100% 125,716,706 16,807,046 173,78	81

	Pro Forma Vendor Tariffed	Surcharge for Outside City	Withdrawal	
	Charge for	Service	Fee	
Vendor/	Pro Forma	Harrodsburg = 8.4 %	Harrodsburg = .000284	Total
Service Dates	Purchases	Danville = 20 %	Danville = .000213	Pro forma
(Col. A)	(Col. G)	(Col. H)	(Col. I)	(Col. J)
Harrodsburg				
Account 13-2500				
12/15/02-1/15/03	4,950.58	415.85	132.66	5,499.09
11/25/02-12/15/02	5,922.44	497.48	160.26	6,580.19
10/24/02-11/25/02	5,509.33	462.78	148.53	6,120.65
9/24/02-10/24/02	5,412.05	454.61	145.77	6,012.43
8/25/02-9/24/02	12,252.64	1,029.22	340.04	13,621.90
7/08/02-8/25/02	5,209.17	437.57	140.01	5,786.75
6/14/02-7/08/02	3,719.99	312.48	97.71	4,130.18
5/15/02-6/14/02	5,777.90	485.34	156.16	6,419.40
4/15/02-5/15/02	4,916.49	412.98	131.70	5,461.17
3/15/02-4/15/02	4,995.48	419.62	133.94	5,549.04
2/26/02-3/15/02	4,254.63	357.39	112.90	4,724.92
1/17/02-2/15/02	4,104.13	344.75	108.62	4,557.50
Account 13-2510				
12/15/02-1/15/03	4,025.78	338.17	106.40	4,470.34
11/25/02-12/15/02	4,150.88	348.67	109.95	4,609.51
10/24/02-11/25/02	3,715.00	312.06	97.57	4,124.63
9/24/02-10/24/02	3,911.23	328.54	103.15	4,342.92
8/25/02-9/24/02	4,741.04	398.25	126.71	5,266.01
7/08/02-8/25/02	3,263.50	274.13	84.75	3,622.39
6/14/02-7/08/02	2,456.14	206.32 348.80	61.82 109.99	2,724.27
5/15/02-6/14/02 4/15/02-5/15/02	4,152.36	364.30	115.24	4,611.15 4,816.48
3/15/02-4/15/02	4,336.94 3,837.23	322.33	101.04	4,010.40
2/26/02-3/15/02	3,714.17	311.99	97.55	4,200.00
1/17/02-2/15/02	3,827.25	321.49	100.76	4,123.71
1/17/02-2/13/02	3,027.23	321.49	100.76	4,249.50
Danville				
2/11/2002	3,524.18	704.84	66.08	4,295.09
3/6/2002	3,113.89	622.78	56.98	3,793.65
4/4/2002	3,650.30	730.06	68.88	4,449.23
5/7/2002	3,154.60	630.92	57.88	3,843.40
6/6/2002	4,598.59	919.72	89.92	5,608.22
7/10/2002	5,580.23	1,116.05	111.98	6,808.26
8/9/2002	5,361.15	1,072.23	106.85	6,540.23
9/1/2002	6,213.31	1,242.66	126.80	7,582.77
10/8/2002	5,859.88	1,171.98	118.53	7,150.38
11/7/2002	6,316.43	1,263.29	129.21	7,708.93
12/4/2002	9,222.49	1,844.50	197.24	11,264.22
1/9/2003	8,576.66	1,715.33	182.12	10,474.11
	178,328	22,539	4,336	205,203

- Col. A. Service dates taken from test year wholesale water provider invoices.
- Col. B. Cubic feet purchases for service dates.
- Col. C Percent of total test year purchases for each wholesaler's service period.
- Col. D Allocates pro forma purchases as calculated by Staff of 125,716,706 gallons to each wholesalers service period based upon test year percentages.
- Col. E Converts allocation of pro forma purchases from gallons to cubic feet.
- Col. F Calculates cost of pro forma purchases using wholesale rates in effect during the test year.
- Col. G Calculates cost of pro forma purchases using pro forma wholesale rates in effect subsequent to the test year. The difference in columns F and G indicates the amount of the adjustment attributable to the Harrodsburg rate increase effective December 31, 2003.
- Col. H Calculates the surcharge of each wholesale supplier for providing water service to customers located outside of their city limits. The surcharges are determined by applying the rate to the dollar amounts billed by the vendor, Column G.
- Col. I Calculates the Kentucky River Withdrawal Fee assessed by each wholesale supplier. These fees are determined by applying the rate to the cubic feet purchases, Column E.
- Col. J Calculates the total charge for water service Columns G + H + I.

ATTACHMENT D STAFF REPORT CASE NO. 2003-00401 COMPARISON OF LAKE VILLAGE REQUESTED AND STAFF RECOMMENDED REVENUE REQUIREMENT CALCULATION

	Requested By Lake Village	Recommended By Staff	Difference	Ref.
Operating Expenses	\$ 792,151	\$ 665,512	\$(126,639)	
Debt Principal and Interest	219,633	210,181	(9,452)	Α
Debt Coverage (20 percent of principal and interest)	43,927	42,036	(1,891)	Α
Total Revenue Requirement Less: Other Operating Income Interest Income	1,055,711 (18,445) (14,838)	` ' '		В
Revenue Required from Rates Less: Normalized Revenues from Rates	1,022,428 (718,278)	891,797 (736,284)	(130,631) (18,006)	
Required Revenue Increase	\$ 304,150	\$ 155,513	\$(148,637)	

- (A) <u>Debt Principal and Interest</u>. Lake Village's debt service request of \$219,633 includes principal and interest payments on three Farmer's National Bank Notes and eight Rural Development Loans. The annual principal and interest payments of the Farmer's notes were \$3,153, \$6,299 and \$37,788. The Farmer's note represented by the largest payment was, in part, used to refinance the other two Farmer's notes. Lake Village no longer has the liability of the two retired notes and the principal and interest payments should not be included in the calculation of pro forma revenue requirements. Staff's adjustment also reduces Lake Village's debt coverage requirement.
- (B) <u>Interest Income</u>. Lake Village's 2002 annual report filed with this Commission and its auditors report of 2002 presents comparative financial information for the years of 2001 and 2002. In those reports, 2001 and 2002 interest income is stated at \$14,838 and \$7,487, respectively. It is apparent that Lake Village cited the wrong amount for the

test year in its application. Staff has used the interest income reported for 2002, the te	st
year.	

ATTACHMENT E STAFF REPORT CASE NO. 2003-00401 STAFF'S COST OF SERVICE STUDY

Northpoint Training Center: Staff reviewed the factors and the amount of mains dedicated to the Northpoint Training Center filed by Lake Village in this application. After review Staff concurred with the information filed by Lake Village as having reasonably allocated costs for this customer.

Retail Cost of Service Study:

Field Review: Lake Village requested in the application to change their rate structure from their current five (5) step declining block rate to a three (3) step declining block rate. During Staff's field review and discussions with Carynn Lee of The Kentucky Rural Water Association, who is responsible for the Cost of Service Study filed in Lake Village's application, a miscalculation was discovered in the Cost of Service Study for the revised rate structure. Ms. Lee had a discussion with Lake Village concerning this miscalculation and they chose not to file any revisions to the application. Staff will address this issue in Staff's revised Cost of Service of Study. Lake Village through Ms. Lee and Staff's field review has informally asked that Staff consider revising the rate structure to reflect the usage patterns of the Association's customers.

<u>Staff's Rate Discussion</u>: Staff concurs with the method used in the Cost of Service Study filed with the application with revisions, based on information gathered during the field review.

Staff's review established a total revenue requirement of \$917,729 for Lake Village, \$8,233 is obtained through the rate calculated for Northpoint Training Center, \$18,445 is obtained through other operating revenue and \$7,487 is obtained through interest income. Staff developed rates that will collect the remaining \$883,564 from the association's retail customers. The utility's expenses were analyzed and allocated according to three different classifications: Commodity, Demand, and Customer.

Commodity costs are those directly associated with the cost of water. Demand costs are those associated with providing the facilities to meet the peak demands placed on the system. Customer costs are those incurred to serve customers regardless to the varying usage.

The Allocation of Expenses sheet of Staff's revised Cost of Service Study shows the allocation of Operation and Maintenance expenses to the functional cost components, Commission Staff utilized information obtained through the utility's application and field reviews to allocate these costs. Administrative and general expenses are allocated to the cost components based on the subtotal allocated percentages.

The Allocation of Costs sheet of Staff's revised Cost of Service Study allocates the remaining portion of the Revenue Requirement from Rates to the retail customer in the functional cost components of Commodity, Demand and Customer. The allocation

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process results in \$202,137 in commodity costs, \$564,765 in demand costs and \$116,660 in customer costs.

Calculation of Proposed Rates: Staff has reviewed the revised rate structure requested by Lake Village in the application. Lake Village's calculations do not include the new customers that were added by construction projects previous to the filing of this rate case. There were 19 new customers added during the test year and 32 customers added during 2003 that was not normalized in the calculations used to formulate Lake Village's proposed new rates. Staff has added and normalized the usage for these new customers in the calculations of the rates.

Staff's revised Cost of Service Study has two (2) sheets for the Calculation of Rates. The first sheet is the Staff's calculation of rates (1) using the proposed rate schedule submitted by Lake Village in their application. The second sheet is the Staff's calculation of rates (2) using a rate schedule that Staff is recommending to be adopted as the new rates and rate schedule for Lake Village. Staff has reviewed the proposed rate structure as requested by Lake Village and further reviewed other rate structures. Total commodity costs are allocated across the rate steps in accordance with usage percentages. Total demand costs are allocated across the rate steps in accordance with usage that has been adjusted to reflect the higher peak demands that are caused in the lower rate steps. Total customer costs are all collected in the first rate step, or minimum bill, since those costs do not differ with varying usage.

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The total for the first rate step is \$432,029 which is divided by the number of bills issued on an annual bases which calculates to a minimum bill of \$19.64 for the first 2,000 gallons. The totals for the remaining rate steps are each divided by the actual water usage for each rate step to calculate the remainder of the rates.

Staff's is recommending the adoption of the three (3) step declining block rate schedule of the First 2,000 gallons, Next 18,000 gallons and Over 20,000 gallons and the corresponding rates as stated in the Staff's revised Cost of Service Study. It is Staff's opinion that this rate schedule and the corresponding rates are the most equitable for the usage patterns of the customers of Lake Village.

Allocation of Plant Value					
	Total	Commodity	Demand	Customer	
Land & Land Rights	\$49,648	•	\$49,648		
Structures and Improvements	42,324		42,324		
Supply Mains	15,500		15,500		
Pumping Equipment	50,800		50,800		
Distribution Reservoirs & Standpipes	560,946		560,946		
Transmission & Distribution Mains	2,774,264		2,774,264		
Services	187,862			\$187,862	
Meters & Meter Installations	252,775			252,775	
Hydrants	1,960			1,960	
Subtotal	\$3,936,079		\$3,493,482	\$442,597	
Allocation Percentages	100%		88.76%	11.24%	
Office Furniture & Equipment	\$47,321		\$42,002	\$5,319	
Transportation	124,897		110,859	14,038	
Power Operated Equipment	56,016		49,720	6,296	
Other Tangible Plant	119,709		106,254	13,455	
Subtotal	\$347,943		\$308,835	\$39,108	
Total	\$4,284,022		\$3,802,317	\$481,705	
Percentages	100%		88.760%	11.240%	
Allocation Percentages	100%		88.76%	11.24%	
Source: Lake Village Application in Case No. 2003-0040					

Allocation of Depreciation				
	Total	Commodity	Demand	Customer
Structures & Improvements	\$728		\$728	
Supply Mains	469		469	
Pumping Equipment	1,539		1,539	
Dist. Reservoirs & Standpipes	16,999		16,999	
Transmission & Distribution Mains	93,745		93,745	
Services	5,708			5,708
Meters	13,970			\$13,970
Hydrants	98			98
Subtotal	\$133,256		\$113,480	\$19,776
Allocation Percentages	100%		85.16%	14.84%
Office Furniture & Equipment	\$3,753		\$3,196	\$557
Transportation Equipment	4,956		4,221	735
Power Operated Equip	4,817		4,102	715
Other Tangible Plant	5,985		5,097	888
Subtotal	\$19,511		\$16,616	\$2,895
Total	\$152,767		\$130,096	\$22,671
Percentages	100%		85.16%	14.84%
Allocation Percentages	100%		85.16%	14.84%

Source: Lake Village Application in Case No. 2003-00401

Salaries	Total	Commodity	Demand	Customer
	1 2 3 3 3 3 3	, , , , , , , , , , , , , , , , , , , ,		
Transmission & Distribution	\$83,149		\$83,149	
Customer Accounts	\$22,880		. ,	\$22,880
Purchased Water	205,203	205,203		, ,
Purchased Power	5,167			
Employee Benefits	,	·		
Transmission & Distribution	9,720		9,720	
Customer Accounts	1,980			1,980
Payroll Taxes	9,055		7,166	1,889
Amortization Expense	0			0
Materials and Supplies				
Transmission & Distribution	11,409		11,409	
Customer Accounts	10,472			10,472
Contractual Services-Eng.	1,835		1,835	
Contractual Services-Acct.	4,350			4,350
Subtotal - Less Commodity	\$154,850		\$113,279	\$41,571
Allocation Percentages	100%		73.2%	26.8%
Salaries - Commissioners	\$12,000		\$8,784	\$3,216
Salaries - Administrative & General	67,630		49,505	18,125
Benefits - Administrative & General	6,300		4,612	1,688
Insurance Vehicles	5,730		4,194	1,536
Insurance General Liability	6,663		4,877	1,786
Insurance Workers Compensation	5,501		4,027	1,474
Other Insurance	4,224		3,092	1,132
Contractual Services- Legal	2,185		1,599	586
Transportation Expense	7,700		5,636	2,064
Office Supp. and Comp. Support	16,652		12,189	4,463
Field Supplies	751		550	201
Employee Benefits-Uniforms	3,174		2,323	851
Dues & Subscriptions	672		492	180
Communications	7,359		5,387	1,972
Training	1,495		1,094	401
Travel	6		4	2
Miscellaneous & General	2,605		1,907	698
Payroll Taxes – Admin. & General	5,684		4,161	1,523
Other Licenses & Taxes	1,579		1,156	423
Subtotal	\$157,910		\$115,589	\$42,321
Total Operating Expenses	\$523,130	\$210,370	\$228,868	\$83,892

Allocation of Cost of Service				
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$523,130	\$210,370	\$228,868	\$83,892
Debt Service*	252,217		223,868	28,349
Depreciation**	142,381		121,252	21,129
General Water Service Cost	917,728	\$210,370	573,988	133,370
Less:				
Other Income	(18,445)		(9,223)	(9,223)
Interest Income	(7,487)			(7,487)
Northpoint Revenue	(8,233)	(8,233)		
Revenue Required from	\$883,563	\$202,137	\$564,765	\$116,660
Retail Rates				
NOTES:				

^{*}Debt Service has been allocated on the allocation percentage from the Plant Value Sheet.

^{**}Depreciation has been allocated on the allocation percentage from the Depreciation Sheet.

Calculation of Water Rates (1)						
	Total	First 2,000 gallons	Next 8,000 gallons	Over 10,000 gallons		
Actual Water Sales:						
Thousand Gallons	102,396,400	35,046,300	46,435,300	20,914,800		
Percent	100%	34.2%	45.3%	20.4%		
Weighted Sales for Demand:		2	1.5	1		
Thousand Gallons	160,660,350	70,092,600	69,652,950	20,914,800		
Percent	100%	43.6%	43.4%	13.0%		
Allocation of Volumetric Costs:						
Commodity	\$202,137	\$69,131	\$91,568	\$41,236		
Demand	564,765	246,238	245,108	73,419		
Customer	116,660	116,660				
Total	\$883,562	\$432,029	\$336,676	\$114,655		
Number of Bills	22,002					
Proposed Rates		\$19.64	\$7.25	\$5.48		

Verification of Rates				
	Bills	Gallons	Rate	Revenue
First 2,000 gallons	22,002	35,046,300	\$19.64	432,119
Next 8,000 gallons		46,435,300	7.25	336,656
Over 10,000 gallons		20,914,800	5.49	114,822
Total Revenue from Rates				\$883,597
Other Income:				
Other Income				33,283
Northpoint Training Center		4,450,000	\$1.85	8,233
Total Operating Revenue	22,002	106,846,400		\$925,113

^{***}Rate for Over 10,000 gallons was increased by \$0.01 to maintain the Required Revenue from retail rates.

Comparison of Rates **Cost of Service Gallon Usage** Current Increase **Percentage** Rates Rates \$14.20 \$19.64 \$5.44 38.3% 1,000 2.000 19.78 19.64 -0.14 -0.7% 3,000 25.36 26.89 1.53 6.0% 4,000 30.44 34.14 3.70 12.2% 5,000 35.52 41.39 5.87 16.5% 6,000 40.14 48.64 8.50 21.2% 7,000 44.76 55.89 11.13 24.9% 27.9% 8,000 49.38 63.14 13.76 9,000 70.39 16.39 30.4% 54.00 10,000 58.62 77.64 19.02 32.4% 15,000 79.92 113.89 33.97 42.5% 20,000 101.22 150.14 48.92 48.3% 25,000 122.52 177.59 55.07 44.9% 30,000 143.82 205.04 61.22 42.6% 35,000 165.12 232.49 67.37 40.8% 186.42 259.94 39.4% 40,000 73.52 50,000 229.02 314.84 85.82 37.5%

589.34

1,138.34

1,687.34

147.32

270.32

393.32

Comparison of Rates Block Usage Current COSS Block Usage COSS Rates Rates First 1,000 gallons \$14.20 First 2,000 gallons \$19.64 7.25 Next 2,000 gallons 5.58 Next 8,000 gallons Next 2,000 gallons 5.08 Over 10,000 gallons 5.49 Next 5,000 gallons 4.62 Over 10,000 gallons 4.26

442.02

868.02

1,294.02

100,000

200,000

300,000

Effect on Customer Average Bill - 5,000 Gallons Usage				
Current	coss	Amount	% Increase	
Rates	Rates	Increase		
\$35.52	\$41.39	\$5.87	16.50%	

33.3%

31.1%

30.4%

Calculation of Water Rates (2)						
	Total	First 2,000 gallons	Next 18,000 gallons	Over 20,000 gallons		
Actual Water Sales:						
Thousand Gallons	102,396,400	35,046,300	53,857,300	13,492,800		
Percent	100%	34.2%	52.6%	13.2%		
Weighted Sales for Demand:		2	1.5	1		
Thousand Gallons	164,371,350	70,092,600	80,785,950	13,492,800		
Percent	100%	42.6%	49.1%	8.2%		
Allocation of Volumetric Costs:						
Commodity	\$202,137	\$69,131	\$106,324	\$26,682		
Demand	564,765	240,590	277,300	46,311		
Customer	116,660	116,660				
Total	\$883,562	\$426,381	\$383,624	\$72,993		
Number of Bills	22,002					
Calculated Rates		\$19.38	\$7.12	\$5.41		

Verification of Rates					
	Bills	Gallons	Rate	Revenue	
First 2,000 gallons	22,002	35,046,300	\$19.39	426,619	
Next 18,000 gallons		53,857,300	7.13	384,003	
Over 20,000 gallons		13,492,800	5.41	72,996	
Total Revenue from Rates				\$883,618	
Other Income:					
Other Income				33,283	
Northpoint Training Center		4,450,000	\$1.85	8,233	
Total Operating Revenue	22,002	106,846,400		\$925,134	

^{***}Rate for "First 1,000 gallons was increased by \$0.01 and rate for Next 18,000 gallons was increased by \$0.01 to maintain the Required Revenue from retail rates.

Comparison of R	ates_			
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
1,000	\$14.20	\$19.39	\$5.19	36.5%
2,000	19.78	19.39	-0.39	-2.0%
3,000	25.36	26.52	1.16	4.6%
4,000	30.44	33.65	3.21	10.5%
5,000	35.52	40.78	5.26	14.8%
6,000	40.14	47.91	7.77	19.4%
7,000	44.76	55.04	10.28	23.0%
8,000	49.38	62.17	12.79	25.9%
9,000	54.00	69.30	15.30	28.3%
10,000	58.62	76.43	17.81	30.4%
15,000	79.92	112.08	32.16	40.2%
20,000	101.22	147.73	46.51	45.9%
25,000	122.52	174.78	52.26	42.7%
30,000	143.82	201.83	58.01	40.3%
35,000	165.12	228.88	63.76	38.6%
40,000	186.42	255.93	69.51	37.3%
50,000	229.02	310.03	81.01	35.4%
100,000	442.02	580.53	138.51	31.3%
200,000	868.02	1,121.53	253.51	29.2%
300,000	1,294.02	1,662.53	368.51	28.5%

Comparison of Rates			
Block Usage	Current Rates	COSS Block Usage	COSS Rates
First 1,000 gallons	\$14.20	First 2,000 gallons	\$19.39
Next 2,000 gallons	5.58	Next 18,000 gallons	7.13
Next 2,000 gallons	5.08	Over 20,000 gallons	5.41
Next 5,000 gallons	4.62		
Over 10,000 gallons	4.26		

Effect on Customer Average Bill - 5,000 Gallons Usage				
Current Rates	Proposed	Amount Increase	%	
	Rates		Increase	
\$35.52	\$40.78	\$5.26	14.80%	

STAFF'S Recommended Declining Block Rate Structure and Rates for Lake Village				
Usage	Rates			
First 2,000 gallons	\$19.39			
Next 18,000 gallons	7.13			
Over 20,000 gallons	5.41			